



Mass-Producing the World's Factory

Stefan Al

The economic transformation of China into a global manufacturing mecca has emptied many rural areas, creating tens of thousands of migrant workers who float between their hometowns and the giant city-regions, where factory workers are in high demand. Stefan Al explores the architectural and town-planning aspects of this seismic shift, documenting factories, dormitories, “urban villages” and the lives of the individuals who populate them.

In 2008, when a British man discovered photos of what appeared to be a young factory woman in a pink-striped outfit¹ posing at an assembly line on his brand new iPhone, the Shenzhen factory worker became an overnight Internet superstar. The photos were uploaded to an online forum and went viral. People all over the world started to speculate about the identity of “iPhone Girl,” her teenage face smiling, her white-gloved hands making victory signs. (Roy 2011). She is one of the many rural migrants who have flocked to major cities in China in search of jobs. Like many “factory girls” and “factory boys,” she worked for a large manufacturing corporation, namely the Taiwanese electronics giant Foxconn,² the world’s largest manufacturer of electronic components.

Foxconn City is a walled complex that measures around 3 square kilometers (1.2 square miles). It is located in Shenzhen and is home to 420,000 factory workers. The compound itself is practically a self-contained city with its own fire brigade, hospital, bank, television broadcasting station and even Foxconn-stamped manhole covers. The photo of iPhone Girl only shows a glimpse of what occurs within the walled compound. However, it has opened a window to allow consumers to see past the fine print “Assembled in China.” Through modern technology and efficient means of transportation, many major international corporations are able to implement offshore manufacturing in countries where labor is cheap. These laborers work long hours and make only a few dollars a day. It is an ironic and poignant fact that iPhone Girl will probably never be able to afford an iPhone.

When China began its economic reform in 1978, factory owners saw it as an opportunity to utilize the country’s growing labor supply, whose low cost and compliance had been maintained by deepening inequalities and limitations on migrant workers’ rights, including housing (Ngai 2004). They brought jobs into China, which attracted poor rural residents to migrate to cities like Shenzhen in the hope of a better life. However, the official number of migrant workers is controlled through China’s household registration system, or *hukou*,³ with characteristics of an apartheid system (Chan 1998). This system was codified in the 1950s to constrain the movement of villagers to urban areas by designating all Chinese citizens as either “rural” or “urban” residents and by requiring official permission for permanent migration. Despite government control, major cities like Shenzhen experienced a population spike. What used to be a fishing town with a population of 280,000 rapidly became a megacity when Shenzhen was appointed a Special Economic Zone in 1980. Within 30 years, the city’s population had increased fiftyfold to an estimated 14 million. Without a

¹ See: www.cnet.com/news/secrets-of-the-mysterious-iphone-girl.

² Website: www.foxconn.com.

³ For more information on the *hukou* system, see: <http://blogs.wsj.com/chinarealtime/tag/hukou>.

doubt, southern China has become the “factory of the world” and the largest industrial region on Earth.

In spite of decades of rapid growth in the south of China, this new global center of production is relatively invisible to the West. The mass-produced consumer products distributed all over the world and to a myriad of malls come primarily from one region in the south of China, the Pearl River Delta (PRD). The delta spreads around the Pearl River estuary in Guangdong Province, where the river flows into the South China Sea. The PRD is a 26,000 km² megacity region with a population of 120 million, and houses many of the world’s largest manufacturing companies. It is also home to a floating population of more than 30 million migrant workers who move in and out of the towns based on the ebb and flow of their hometown festivals and work opportunities.

“Shenzhen speed,” a term referring to the velocity of urbanization in Shenzhen, has now become common Chinese vernacular. The city and other surrounding urban areas have transformed so rapidly that they are no longer recognizable. Over a period of 30 years, the region has traded its picturesque agrarian qualities for the grim industrial metropolis—commonly recognized by its urban sprawl, central traffic congestion and environmental degradation. The interests of private developers, including factory owners, have generally led to haphazard growth. However, the emergence of these gritty industrial landscapes scattered along the Pearl River Delta must be seen within the context of the trend toward a constantly shifting global supply chain for consumer products. Although these landscapes of production lie conveniently out of sight of the centers of consumer society, they make up the other side of a Janus-faced economic geography.

Many of the migrant workers live in substandard and overcrowded housing conditions in factory town dormitories or urban villages. A 2006 survey in Shenzhen revealed that 37% of migrants did not have a private toilet, bathroom or kitchen; over 40% did not have showers. In one extreme case, two couples shared a room of 9 m² (about 100 sq. ft) (Wang *et al.*, 2010). These privations appear to have their costs: in 2010, Foxconn City made headlines in newspapers⁴ across the globe with news of a staggering 14 reported suicides within an 11-month period, including a double suicide. The suicides were rumored to be linked to the harsh working conditions: long hours, alienation, low wages and strict company deadlines. In order to prevent workers from leaping to their deaths, the company ended up attaching large safety nets to the factory buildings.

At the Chinese factory towns, little is left of the utopian impulses of the Western company town experiments of the 19th century, or the social planning embedded in communist China’s work unit, the “*danwei*” of the 1950s and 1960s. Chinese *danwei* planners organized factory complexes in such a way as to promote the transformation of urban citizens into proletarians loyal to the socialist state, and to encourage an egalitarian consciousness (Bray 2005). They laid out workers’ living space around key buildings and common facilities, including offices for the Party committee, lecture theatres, and classrooms. Today, the organizing logic of the rows of factory buildings, dormitories, and assembly lines reinforces the atomization of workers in the new China, replacing the social contract with a contract between an individual employee and a firm that is itself a contractor in a global value chain. This may be favorable from the workers’ perspective in some ways (they are “free agents”) but it also takes away the sense of work being a common project. The architecture of the 21st-century Chinese factory town is dedicated not to achieving social goals but to minimizing the cost of labor.

⁴ See, for example, the following article from the website of British newspaper *The Guardian*: www.theguardian.com/commentisfree/2013/aug/05/woman-nearly-died-making-ipad.

Quotes

1. Xiao Lan

“We have two working shifts: the morning is from 8 a.m. to 3 p.m.; the afternoon shift is from 3 p.m. to 8 p.m. I live in a rented apartment with my family nearby. It usually takes 20 minutes to walk to work every day. I like to go to town for shopping and entertainment. When I stay at home, I cook a lot and sometimes play with my nephew. I love this job very much. Even though the job is quite boring sometimes, I still want to keep my job until I get married, of course, that will be good to have a baby too.”

Name: Xiao Lan

Age: 27

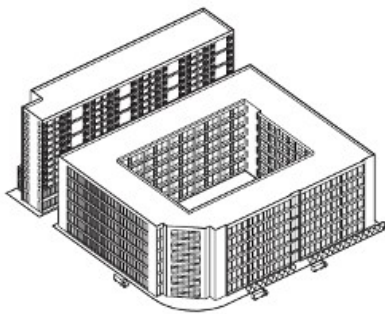
Hometown: Jiangsu Province

Marital status: Single

Post: Security guard

Number of years in the factory: 2

Monthly income: RMB 1,500



Fonhon clothing factory

Plot size: 0.8 ha (2 acres)

Number of workers: 500

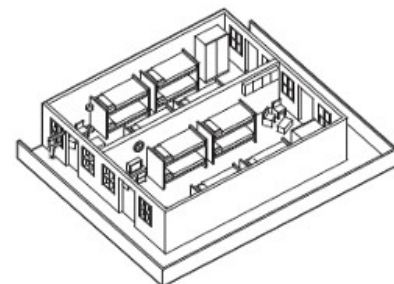
Period of construction: 2000s

Dormitory building

Workers' suite

Capacity: 6–8 persons

Dormitory size: 32 m² (344 sq. ft)



2. Uncle Wah

“It is a laborious job to pack the baked tiles from the kiln on to the trolleys, because the tiles are heavy and the environment is very hot. It is difficult for the factory to find new workers now. Most workers in this factory are middle-aged, and youngsters are not willing to work in ceramics factories anymore. Due to the extremely high temperatures in the workshop, the owners installed larger electric fans in the factory to improve the situation. In summer, Chinese herb teas are provided for us as a relief from the harsh conditions caused by staying inside the workshop.

“This factory is good because the salary is paid on time and it seems that I have never experienced late payment. I work four days a week and eight hours each working day. I normally have lunch around 2:30 p.m. I always go back to Heshan to spend time with my wife and children during the weekends. The travel duration via coach is only two and a half hours.”

Name: Uncle Wah

Age: Over 40

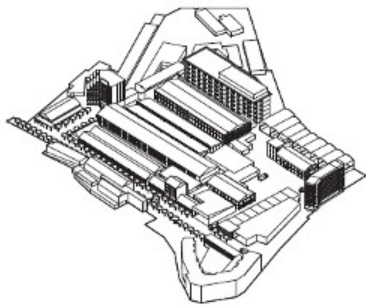
Hometown: Heshan, Guangdong Province

Marital status: Married with a son and a daughter

Post: Tile-packing worker

Number of years in the factory: 10

Monthly income: RMB 1,200



Huanqiu ceramics factory

Plot size: 8 ha (20 acres)

Number of workers: 600

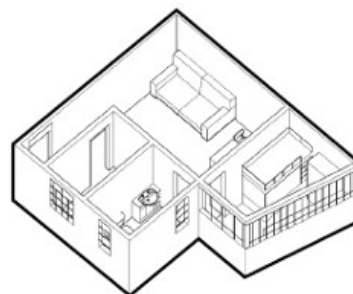
Period of construction: 1950s

Dormitory building

Private family suite

Capacity: 5–6 persons

Dormitory size: 45 m² (484 sq. ft)



3. Xiao Ming

“My job is pretty easy and there is not a lot of work to do. I work for eight hours a day. If there are no orders, I can have a rest and chat with colleagues. The salary here is reasonable; they pay me RMB 1,500–2,300 per month. The harder you work, the more you get paid. I manage to save about RMB 800–1,200 per month. I am single now. I am getting married to a local girl next year. Then I will work here permanently. After work, I like to play basketball with my friends in the village. Sometimes I like to play video games. I live in the urban village nearby. It takes about five minutes to get to the factory by foot. The urban village is very crowded; buildings are very close to one another. If I have enough money, I would like to move out.”

Name: Xiao Ming

Age: 20

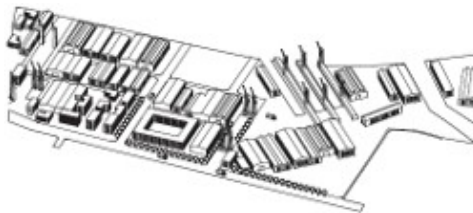
Hometown: Zhaoqing, Guangdong Province

Marital status: Single

Post: Assembly worker

Number of years in the factory: 2

Monthly income: RMB 2,000



Shipyard

Plot size: 65 ha (161 acres)

Number of workers: Over 5,000

Period of construction: 1950s

Typical house in an urban village

Workers' suite

Capacity: 2–4 persons

Accommodation size: 21 m² (226 sq. ft)



Bibliography

- Bray, D. 2005. *Social Space and Governance in Urban China: The Danwei System from Origins to Reform*, Stanford: Stanford University Press.
- Chan, A. 1998. "Labor standards and human rights: the case of Chinese workers under market socialism", *Human Rights Quarterly*, vol. 20, no. 4, pp. 886–904.
- Wang, Y. P., Wang, Y. and Wu, J. 2010. "Housing migrant workers in rapidly urbanizing regions: a study of the Chinese model in Shenzhen", *Housing Studies*, vol. 25, no. 1, pp. 83–100.
- Ngai, P. 2004. "Women workers and precarious employment in Shenzhen special economic zone, China", *Gender & Development*, vol. 12, no. 2, pp. 29–36.
- Roy, A. 2011. "Postcolonial urbanism: speed, hysteria, mass dreams", in Roy, A. and Ong, A. (eds.), *Worlding Cities: Asian Experiments and the Art of Being Global*, Oxford: Wiley–Blackwell, pp. 307–332.

Further reading

For a more detailed discussion, see Al, Stefan (ed.). 2012. *Factory Towns of South China: An Illustrated Guidebook*, Hong Kong: Hong Kong University Press.

Stefan Al is a Dutch architect and Associate Professor of Urban Design at the University of Pennsylvania. His books include *Factory Towns of South China: An Illustrated Guidebook*; *Villages in the City: A Guide to South China's Urban Informality*; *Mall City: A Catalog of Hong Kong*; and a forthcoming book on Las Vegas called *The Strip*.

To quote this article:

Stefan Al, "Mass-Producing the World's Factory", *Metropolitiques*, 9 February 2015.
URL: <http://www.metropolitiques.eu/Mass-Producing-the-World-s-Factory.html>.